



## RESEARCH ARTICLE

# Inpatients' opinions on a hospital in Portugal [version 1; peer review: 2 approved]

Carina C Silva, Agripino Oliveira

Department of Internal Medicine, Centro Hospitalar Vila Nova Gaia, Espinho, Portugal

**v1** First published: 13 Feb 2013, 2:49 (<https://doi.org/10.12688/f1000research.2-49.v1>)Latest published: 13 Feb 2013, 2:49 (<https://doi.org/10.12688/f1000research.2-49.v1>)**Abstract**

**Background:** Little is known about the relationship between the opinions of inpatients and the degree to which hospitals are improving in performance over time. The aim of this study was to determine the personal assessment level of inpatients or their representatives regarding aspects of health care in an internal medicine ward.

**Methods:** We carried out a questionnaire in September 2011 with 284 discharged patients and patient representatives, focusing on their opinions about the department, health professionals and amenities, with response options ranging from 1 (very bad) to 5 (very good). The relationships between domains from the questionnaire and socio-demographic factors were examined using a t-test and one-way ANOVA.



**Results:** The response rate was 78%. The patients showed a slightly higher mean score (m) for factors in the medical care domain than did the patient representatives (m = 4.51 vs. m = 4.27; p = 0.014). The mean score of all the items in all domains was 4.24; this allowed us to determine the difference from the overall mean (DIFM) for medical care (DIFM = 0.18; p = 0.000), foods (DIFM = -0.31; p = 0.000), diagnostic tests (DIFM = -0.15; p = 0.036) and transport (DIFM = -0.41; p = 0.000). Respondents with a medium or higher educational level gave lower scores to the domains food (m = 3.74; p = 0.004), diagnostic tests (m = 3.72; p = 0.04) and transport (m = 3.62; p = 0.025) than those with lower educational levels. The domains facilities (m = 2.4; p = 0.04) and diagnostic tests (m = 3.63; p = 0.009) were given lower scores by those aged <50 years compared with older respondents.

**Conclusions:** Our findings suggest that the evaluation of the responders will allow the hospital management to make improvements in the quality of care.

**Keywords**

Questionnaire, health services quality, health professionals and amenities

**Open Peer Review**Reviewer Status  

	Invited Reviewers	
	1	2
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- Erin Aiello Bowles**, Group Health Research Institute, Seattle, WA, USA
- Saravana Kumar**, University of South Australia, Adelaide, Australia

Any reports and responses or comments on the article can be found at the end of the article.

**Corresponding authors:** Carina C Silva ([carinamed@gmail.com](mailto:carinamed@gmail.com)), Agripino Oliveira ([agripino@netcabo.pt](mailto:agripino@netcabo.pt))

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## Introduction

Patient satisfaction has been increasingly used as a quality indicator in health care<sup>1</sup>. The theoretical concept of satisfaction is controversial, but the user relates it with the set of reactions experienced<sup>2</sup>. Therefore, the measurement of customer satisfaction should be considered as a personal opinion of health care services that are provided. One of the most used measures<sup>3</sup> is the difference between the expectations of the user in relation to the care and their perception of the care actually received. Indeed, it is expected that the patients, throughout their experiences, build a set of beliefs about the health system and professionals. The importance of attending to this type of belief has implications for the quality of communication with health professionals, the degree of trust in health care service delivery and customer satisfaction with the care provided. The aim of this study was to determine the personal assessment of inpatients or their representatives regarding aspects of health care in an internal medicine ward.

## Setting

The Centro Hospitalar Vila Nova Gaia-Espinho, where the study was conducted, is divided into several units. Patients admitted into the internal medicine department who need diagnostic imaging or invasive procedures are transported by ambulance to the central unit.

## Materials and methods

Several sources and methods were used to determine the questions to be included in the questionnaire. Firstly, a search was conducted using the Medline database with the aim of evaluating the tools that have been developed so far to assess the satisfaction of patients hospitalized<sup>4</sup>. Secondly, focus groups of patients, caregivers and health care professionals were used to explore opinions about the positive and negative aspects of care received during hospitalizations. These focus groups were geared towards understanding the issues and expressions that could be used to develop questions to be included in the questionnaire. Thirdly, we developed a pool of items, based on the results of the focus groups and literature search, to be included in the questionnaire. These items were tested with a group of patients and health professionals, and they gave their opinions about the appropriateness of the items and the skills needed to comprehend them and evaluate the content and face validity of the questions.

The questionnaire was designed with twenty-two closed questions. It captures ten domains selected by their relevance to the study: the department's image, facilities, medical care, nursing care, health care assistants (HCAs), secretarial services, reception, food, diagnostic tests and transport. Each domain is composed of between one and four discrete items rated on a five-point scale, in which the response options range from 1 (very bad) to 5 (very good) as shown in [Appendix 1](#). The score for each domain represents the mean of the responses to each item within a given domain. The global mean score was determined by the sum of the items divided by the number of items answered. The questionnaire also contained socio-demographic variables, such as gender, age, educational level, occupational status, marital status<sup>5</sup> and type of respondent.

The respondents' understanding of the questionnaire items can generate different opinions for each one of them. This diversity exposes

the problem of internal consistency of the questionnaire, that is, the degree of uniformity between the answers to each item of the questionnaire. This internal consistency can be measured by Cronbach's alpha<sup>6</sup>, which varies from 0 to 1<sup>6</sup>, and the higher the count, the greater the reliability of the scale of questionnaire. A value of at least 0.70 reflects an acceptable reliability, between 0.80 to 0.90 moderate to high, and exceeding 0.90 high internal reliability.

## Study participants

From 1<sup>st</sup> to 30<sup>th</sup> September 2011, the self-administered questionnaire was filled out by the discharged patients or their representatives. All patients admitted more than 48 hours were given the questionnaire and an envelope. Family members or caregivers (referred to as 'representatives') replaced patients with severe physical or mental diseases, who would have difficulty in understanding and filling out the questionnaire. The deceased were excluded because their representatives would be in mourning.

All participants were informed of the study's objective, and it was explained to them how to fill out the questionnaire. Delivery was carried out in a sealed envelope. To ensure confidentiality, participants were asked to put the completed questionnaires in a closed box at the time of discharge, according to the declaration of Helsinki. The board of directors and ethics committee of the hospital approved the study.

## Statistical analysis

We describe the frequencies (number), percentages, means ( $\mu$ ), median and standard deviation ( $\sigma$ ) of the variables. In univariate analysis, we applied the Student's t-test and analysis of variance (ANOVA) for the domains addressed in the questionnaire, considering the value of  $p < 0.05$  statistically significant. Statistical analysis was performed using Statistical Package for the Social Sciences (SPSS) version 19.

## Results

A total of 284 inpatients were enrolled for the study, of whom 199 completed the questionnaire (response rate = 78%) and 31 died (10.9%). Respondents had a mean age of 62.9 years with a median of 66.5; 51% were men; 64% were married or cohabitating; 59.3% were retired and 51.7% had a basic (primary) education ([Table 1](#)).

Cronbach's alpha measures of internal consistency were computed for each of the ten domains, which showed a reliability for the overall scale of 0.89 ([Table 2](#)). In all domains, acceptable values were met, reaching a minimum of 0.868 (for diagnostic tests) and a maximum of 0.880 (for medical care).

Answers to the items in the ten domains had an overall mean score of 4.24 ([Figure 1](#)), out of a maximum of 5. This allowed us to compare with the mean score for each domain. The following domains had significantly more positive scores than the overall mean: department's image (mean difference (DIFM) = 0.15;  $p = 0.0001$ ), medical care (DIFM = 0.18;  $p = 0.0001$ ), nurses (DIFM = 0.21;  $p = 0.0001$ ) and secretarial services (DIFM = 0.15;  $p = 0.002$ ). The following domains had significantly more negative scores than the overall mean: reception (DIFM = -0.16;  $p = 0.016$ ), food (DIFM = -0.31;  $p = 0.0001$ ), diagnostic tests (DIFM = -0.15;  $p = 0.036$ ) and transport

**Table 1. Sociodemographic data of the respondents.**

Variables		Number	%	Mean	Median
<b>Age [years]</b>				62.87	66
<b>Length of stay [days]</b>				12.26	9
<b>Sex</b>	Women	98	49		
	Men	101	51		
<b>Marital status</b>	Married/Cohabiting	126	64		
	Single	23	11.7		
	Widowed	31	15.7		
	Separated/divorced	17	8.6		
<b>Occupation</b>	Employed	45	22.7		
	Unemployed	15	7.5		
	Homemaker	12	6		
	Student	2	1		
	Retired	118	59.3		
	Other	7	3.5		
<b>Education level</b>	No education	10	5.9		
	Primary studies	89	51.7		
	High school/secondary education	58	33.7		
	University	15	8.7		
<b>Length of hospital stay</b>	< 9 days	101	50.8		
	9 to 13 days	40	20.1		
	> 13 days	58	29.1		
<b>Respondents</b>	Patient	133	66.8		
	Family	61	30.7		
	Caregivers	3	1.5		
	Other	2	1		
<b>Age Group</b>	< 50 years	44	22.2		
	50–65 years	53	26.8		
	> 65 years	101	51		

(DIFM = -0.41;  $p = 0.0001$ ). In the domains related to the facilities and HCAs, there were no significant differences from with the overall mean.

Table 3 shows a univariate analysis of selected variables and their relationship with the mean scores of the questionnaire's domains. We found that the variables 'gender', 'occupation', 'marital status' and 'length of hospital stay' showed no difference in all domains, except for secretarial services, for which higher scores were given by married respondents ( $\mu = 4.49$ ;  $p = 0.008$ ).

For the variable 'respondents', patients gave higher mean scores for the domains: department's image ( $\mu = 4.49$ ,  $p = 0.001$ ) and medical care ( $\mu = 4.51$ ;  $p = 0.014$ ) than patient representatives. In the variable 'education level', respondents with a medium/higher level of education (secondary or university education) gave lower mean scores in the domains: HCAs ( $\mu = 4.17$ ;  $p = 0.013$ ), reception ( $\mu = 3.89$ ;  $p = 0.002$ ), food ( $\mu = 3.74$ ;  $p = 0.004$ ), diagnostic tests ( $\mu = 3.72$ ;  $p = 0.04$ ) and transport ( $\mu = 3.62$ ;  $p = 0.025$ ). In the variable 'age group', respondents < 50 years old, assessed the mean score in the domains: department's image ( $\mu = 4.17$ ;  $p = 0.047$ ), facilities ( $\mu = 2.4$ ;

**Table 2. Grouping of domains with their respective Cronbach's alphas.**

Domain	Cronbach's alpha
Department's image	0.881
Facilities	0.874
Medical care	0.888
Nursing care	0.879
Nursing assistants	0.875
Secretarial services	0.880
Reception	0.885
Food	0.881
Diagnostic tests	0.868
Transport	0.882
Cronbach's alpha GLOBAL	0.890

p = 0.04), nurse care ( $\mu = 4.15$ ; p = 0.048), HCAs ( $\mu = 4.04$ ; p = 0.046) and diagnostic tests ( $\mu = 3.63$ ; p = 0.009).

**Questionnaire**

1 Data File

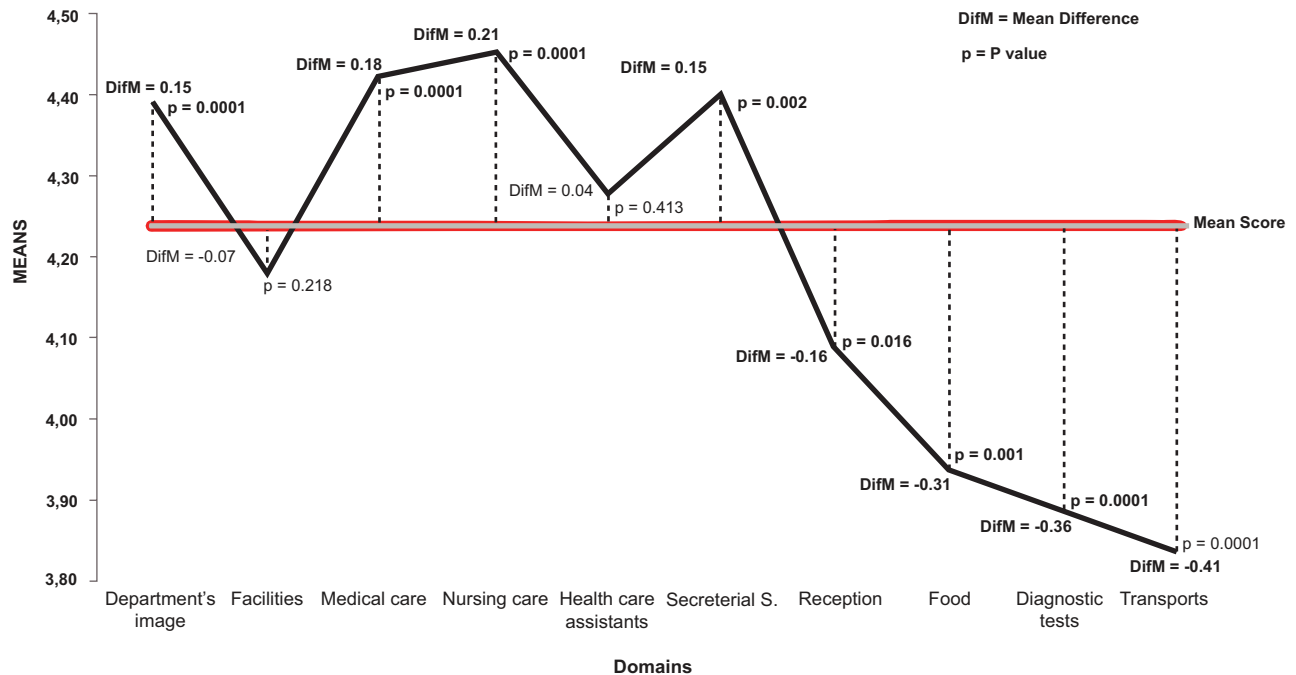
<http://dx.doi.org/10.6084/m9.figshare.154385>

**Discussion**

The typical participant was male, married and retired with a low educational level in this convenience sample. Respondents reported good results with the care provided from the professionals, with scores above four points, but the amenities were rated below this score. The present findings seem to be consistent with another study<sup>7</sup>, which found the following factors to be scored, in descending order: medical performance, nursing staff, amenities and accessibility. In another study in Israel<sup>8</sup>, the attitudes of nurses and medical care were the most important determinants of patient satisfaction with the care received. In a study performed in Kuwait<sup>9</sup>, medical care was the most favorably rated domain, followed by admission process and housekeeping, while nursing care was the least favorably rated domain. It can therefore be assumed that the assessment of patient's satisfaction is based not only on the care received.

The evaluation instrument used here was a questionnaire developed for this purpose, following a search of the literature on the satisfaction of patients or families to determine the applicability of the questions used. Some studies<sup>4-10</sup> have chosen variables related to information provided from the patient or their family, the existing support structures, the services available at the hospital and concerns about the ability to meet the patient's needs during hospitalization.

To avoid bias in the questionnaire<sup>4</sup>, we used two methods: peer review for content validation and prior testing by a group of inpatients. To test the reliability of the questionnaire we used Cronbach's alpha, and the results showed values indicating internal consistency in all areas. If alpha is too high this may suggest that some items



**Figure 1. Ratio of the mean global score to the mean from the different domains of the questionnaire.** Student t test or analysis of variance (ANOVA) with the Tukey's multiple comparison test performed.

**Table 3. Univariate analysis by relevant variable.**

	Depart. image			Facilities			Medical care			Nurs. care			HCAs			Secretarial S. Reception			Food			Diag. testes			Transports				
	$\mu$	$\sigma$		$\mu$	$\sigma$		$\mu$	$\sigma$		$\mu$	$\sigma$		$\mu$	$\sigma$		$\mu$	$\sigma$		$\mu$	$\sigma$		$\mu$	$\sigma$		$\mu$	$\sigma$			
Gender	4.41	0.59		4.16	0.8		4.38	0.66		4.45	0.66		4.32	0.6		4.4	0.6		4.11	0.84		3.99	0.75		3.88	0.9		3.88	1.06
	4.37	0.58		4.18	0.69		4.46	0.63		4.46	0.66		4.24	0.6		4.39	0.74		4.06	0.87		3.87	0.84		3.89	0.8		3.78	0.95
<i>P value</i>	0.681			0.852			0.387			0.984			0.367			0.862			0.69			0.29			0.947			0.51	
Respondent	4.49	0.52		4.2	0.72		4.51	0.59		4.49	0.64		4.34	0.58		4.39	0.7		4.11	0.84		3.91	0.82		3.92	0.81		3.83	1.02
	4.19	0.65		4.13	0.8		4.27	0.73		4.37	0.7		4.17	0.62		4.42	0.61		4.03	0.9		3.99	0.76		3.83	0.91		3.85	0.98
<i>P value</i>	<b>0.001</b>			0.525			<b>0.014</b>			0.222			0.059			0.735			0.57			0.496			0.483			0.932	
Education level	4.4	0.6		4.28	0.71		4.4	0.68		4.51	0.68		4.39	0.58		4.43	0.62		4.29	0.73		4.1	0.82		4.	0.79		4.	0.97
	4.39	0.56		4.08	0.78		4.49	0.59		4.38	0.59		4.17	0.57		4.35	0.72		3.89	0.83		3.74	0.76		3.72	0.92		3.62	1.05
<i>P value</i>	0.915			0.075			0.332			0.181			<b>0.013</b>			0.467			<b>0.002</b>			<b>0.004</b>			<b>0.04</b>			<b>0.025</b>	
Marital status	4.43	0.53		4.21	0.74		4.47	0.63		4.44	0.67		4.29	0.61		4.49	0.61		4.07	0.91		3.93	0.82		3.87	0.87		3.84	1.04
	4.31	0.66		4.09	0.76		4.34	0.68		4.45	0.65		4.26	0.57		4.21	0.75		4.08	0.76		3.93	0.77		3.88	0.78		3.8	0.94
<i>P value</i>	0.15			0.278			0.17			0.949			0.755			<b>0.008</b>			0.946			0.958			0.94			0.807	
Work status	4.23	0.66		3.95	0.82		4.38	0.73		4.33	0.67		4.17	0.60		4.34	0.68		3.85	0.82		3.95	0.70		3.83	0.93		3.74	1.14
	4.42	0.55		4.23	0.72		4.42	0.64		4.48	0.67		4.29	0.58		4.45	0.68		4.14	0.89		3.98	0.82		3.95	0.78		3.90	0.95
	4.49	0.56		4.30	0.70		4.53	0.54		4.50	0.60		4.37	0.65		4.30	0.85		4.22	0.71		3.78	0.85		3.76	0.94		3.76	1.02
<i>P value</i>	0.089			0.055			0.561			0.386			0.328			0.432			0.122			0.419			0.459			0.648	
Length of stay	4.4	0.54		4.2	0.7		4.52	0.53		4.45	0.59		4.39	0.62		4.33	0.7		4.1	0.84		3.99	0.84		3.93	0.86		3.88	1.01
	4.52	0.59		4.43	0.81		4.53	0.62		4.66	0.59		4.49	0.58		4.6	0.5		4.16	0.99		4.24	0.69		3.86	0.95		3.92	1.
	4.4	0.62		4.16	0.76		4.43	0.73		4.46	0.64		4.15	0.59		4.4	0.8		4.14	0.72		3.79	0.84		3.87	0.83		3.64	0.96
<i>P value</i>	0.621			0.103			0.513			0.567			0.05			0.129			0.386			0.25			0.82			0.665	
Age group	4.17	0.71		4.02	0.85		4.36	0.69		4.15	0.66		4.04	0.61		4.32	0.6		4.03	0.66		3.85	0.66		3.63	0.94		3.65	1.02
	4.47	0.55		4.28	0.76		4.55	0.61		4.57	0.53		4.39	0.66		4.27	0.93		3.97	0.9		3.93	0.88		3.97	0.87		3.86	1.
	4.51	0.48		4.3	0.67		4.52	0.57		4.61	0.57		4.44	0.55		4.51	0.59		4.25	0.85		4.05	0.86		3.99	0.81		3.87	0.98
<i>P value</i>	<b>0.047</b>			<b>0.04</b>			0.185			<b>0.048</b>			<b>0.046</b>			0.195			0.241			0.329			<b>0.009</b>			0.175	

$\mu$ -> Mean of distribution;  $\sigma$ -> Standard deviation; HCAs (Health Care Assistants).

are redundant<sup>6</sup> and test the same question but in a different way. A maximum alpha value of 0.90 is recommended<sup>6</sup>.

The response rate of 78% for a sample of convenience and a self-administered questionnaire is considered good. This finding is in agreement with Stizia's<sup>11</sup> findings, which showed a response rate of 65% for self-administered questionnaires and in studies with a convenience sample of 25%.

In this study, we found that gender, marital status, occupation (retired or not) and length of stay did not affect the scores in the domains of the questionnaire. A previous study has shown that older subjects tend to have higher scores<sup>12</sup>, and this was confirmed in all the areas of our questionnaire.

Data from this study showed that the higher the educational level, the lower the scores for the responses in the domains of amenities, with the exception of medical care. A possible explanation for these differences might be better understanding and knowledge of the procedures to be undergone. Our study is in agreement with another<sup>4</sup> in which had an inverse relation to educational status, with high educational levels associated with low scores.

We found that with the variable 'respondent', patients provided high scores in all domains, with statistical significance in the medical care. Unlike the inpatients, the representatives tended to be more demanding or critical and reported lower scores in some domains. It is likely that representatives complain about inadequate information and practical advice, especially on how to deal with potential decompensated disease<sup>13</sup>.

This study provides valuable information on the effect of all variables in the various fields that constitute our satisfaction tool in hospitalized patients. Therefore, we offer a picture of the determinants of satisfaction in several areas, which have never been studied together. The study may contribute to the understanding of the factors that influence inpatient satisfaction in hospital wards and could be used as a resource for evaluating the quality of care.

The limitations of this study include that it is a cross-sectional study and inevitably a convenience sample, composed of the patients discharged during one month. However, this convenience sampling is useful when attempting to study the satisfaction of a niche segment such as inpatients in internal medicine. Moreover, the range of possible explanatory variables included in this study, although large, was not as comprehensive as we would have liked. Several other variables, such as previous health status, could also have been assessed. However, when previous mental and physical

health is poor, this is associated with lower satisfaction with hospitalization<sup>14</sup>. These patients have more hospitalizations, more aggressive treatment, and are more likely to suffer from medical complications<sup>15</sup>.

## Conclusions

This study allowed us to conclude that respondent satisfaction was above average in all areas of the questionnaire. Although the mean score was high for all domains, amenities had the lowest level of satisfaction, pointing to the need to reassess food, transport and diagnostic tests. Gender, marital status and length of stay at the hospital were not factors that influenced the level of satisfaction of respondents.

Despite the limitations of the study, it was possible to identify the level of satisfaction of patients hospitalized in the internal medicine department, and the influential variables. These findings will allow the hospital management to implement changes in practice and propose actions to improve quality of care, and provide visibility to the teamwork of professionals involved. We conclude that, as in previous studies, there is evidence that the educational level, age and amenities affect the levels of satisfaction. Finally, we must consider that patient representatives are more critical than patients in the evaluation of satisfaction. Therefore, researchers conducting a survey of hospitalized patients' satisfaction in internal medicine departments should be aware of the effect of variables on the responses to the questionnaire and make the necessary adjustments to provide valid results.

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## Author contributions

The authors had equal roles in the study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the paper for publication.

## Competing interests

No relevant competing interests were disclosed.

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SERVIÇO DE MEDICINA INTERNA

## Satisfaction Questionnaire

We would like to know what you think of the inpatient service we offer and if meet to your needs. Yours answers, are confidential and anonymous, that shall contribute for the improvement of the services. Thanks for your time.

### PROFILE OF THE RESPONDENT:

ANSWER WITH A CROSS [☒] JUST IN SQUARE THAT SEEMS MORE SUITABLE TO YOU, EXCEPT THAT ON 1 AND 3 SHOULD PUT THE NUMBER.

1. Age  Years                      Sex W            M
2. Marital status: Married/Cohabiting  Single             Widowed             Separated/divorced
3. How many years of schooling
4. Occupation:      Employed       Unemployed       Homemaker       Student   
Retired                                       Other
5. Respondents:    Patient     Family     Caregivers     Other

Please qualify the service in the following areas and put a circle [o] according to your opinion:	Very Good	Good	Fair	Bad	Very Bad	Do not Know
	5	4	3	2	1	0

### Department image

Is it a reliable department?	5	4	3	2	1	0
Is it a department with experience?	5	4	3	2	1	0
Is it concerned with the patients?	5	4	3	2	1	0

### Facilities

Cleaning of premises	5	4	3	2	1	0
Comfort in the wards	5	4	3	2	1	0
Privacy in the wards	5	4	3	2	1	0

### Medical care:

They hear your complaints	5	4	3	2	1	0
Time enough to take your complaints	5	4	3	2	1	0
Explain to you the illness	5	4	3	2	1	0
Give advice and explain the treatments	5	4	3	2	1	0



**CENTRO  
HOSPITALAR**  
VILA NOVA DE GAIA/ESPINHO  
SERVIÇO DE MEDICINA INTERNA

## Satisfaction Questionnaire

Please qualify services in the following areas and put a circle [o] according to your opinion:	Very Good	Good	Fair	Bad	Very Bad	Do not Know
	5	4	3	2	1	0

### **Nursing care**

Fast response in case of need	5	4	3	2	1	0
Friendliness and availability	5	4	3	2	1	0

### **Health care assistants**

In cleaning the ward	5	4	3	2	1	0
Help in alimentation	5	4	3	2	1	0
Fast response in case of need	5	4	3	2	1	0

### **Secretarial services**

Friendliness and availability	5	4	3	2	1	0
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### **Reception**

Friendliness and availability	5	4	3	2	1	0
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### **In relation to foods**

Quality in the meals (Confection, appearance, temperature, quantity, variety of menu, etc.).	5	4	3	2	1	0
Support during the meal (if you could not feed yourself )	5	4	3	2	1	0

### **Examinations or treatments in other services (x-rays, CT's or procedures)**

Waiting time	5	4	3	2	1	0
Overall how do you rate the quality of services provided in examinations or treatments.	5	4	3	2	1	0

### **Transports**

How evaluate the ambulance transport	5	4	3	2	1	0
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CHVNG-E \_\_\_\_/ 09 /2011

\_\_\_\_\_  
( Signature)



**CENTRO  
HOSPITALAR**  
VILA NOVA DE GAIA/ESPINHO  
SERVIÇO DE MEDICINA INTERNA

## Questionário de Satisfação

Gostaríamos de saber o que pensa do serviço de internamento que oferecemos e se atendem às suas necessidades. As suas respostas, confidenciais e anónimas, contribuem para a melhoria dos nossos serviços. Obrigado pelo seu tempo!

DADOS PESSOAIS DO INQUIRIDO:

**RESPONDA, COM UMA CRUZ [☒] APENAS NO QUADRADO QUE LHE PARECE MAIS ADEQUADO AO SEU CASO, EXCEPTO EM 1 E 3 QUE DEVERÁ COLOCAR O NÚMERO.**

1. Idade  anos                      Sexo  F                       M
2. Estado civil: casado/união facto       Solteiro       Viúvo       Separado/divorciado
3. Quantos anos de escolaridade
4. Situação profissional: Empregado/a       Desempregado/a       Doméstica       Estudante   
Reformado/a       Outro
5. O Inquirido: Doente       Familiar       Cuidador       Outro

Por favor qualifique o serviço nas seguintes áreas e coloque um círculo ☉ de acordo com a sua opinião:	Muito Bom 5	Bom 4	Regu- lar 3	Mau 2	Muito Mau 1	Não Sabe 0
--	----------------	----------	-------------------	----------	----------------	------------------

### IMAGEM DO SERVIÇO

É um serviço de confiança?	5	4	3	2	1	0
É um serviço experiente?	5	4	3	2	1	0
Preocupa-se com os seus doentes ?	5	4	3	2	1	0

### INSTALAÇÕES:

Limpeza das instalações	5	4	3	2	1	0
Conforto nas enfermarias	5	4	3	2	1	0
Privacidade nas enfermarias	5	4	3	2	1	0

### MÉDICOS:

Ouvem as suas queixas	5	4	3	2	1	0
Demoram o tempo suficiente para as suas queixas	5	4	3	2	1	0
Explicam a sua doença	5	4	3	2	1	0
Dão conselhos e explicam tratamentos	5	4	3	2	1	0



**CENTRO  
HOSPITALAR**  
VILA NOVA DE GAIA/ESPINHO  
SERVIÇO DE MEDICINA INTERNA

## Questionário de Satisfação

Por favor qualifique os serviços nas seguintes áreas e coloque um círculo ☉ de acordo com a sua opinião:	Muito Bom 5	Bom 4	Regular 3	Mau 2	Muito Mau 1	Não Sabe 0
--	----------------	----------	--------------	----------	----------------	---------------

### ENFERMEIROS:

Rapidez de resposta em caso de necessidade	5	4	3	2	1	0
Simpatia e disponibilidade	5	4	3	2	1	0

### AUXILIARES

Na limpeza	5	4	3	2	1	0
Na alimentação	5	4	3	2	1	0
Rapidez de resposta em caso de necessidade	5	4	3	2	1	0

### ADMINISTRATIVOS:

Simpatia/Cordialidade	5	4	3	2	1	0
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### PESSOAL PORTARIA:

Simpatia/Cordialidade	5	4	3	2	1	0
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### EM RELAÇÃO À ALIMENTAÇÃO COMO CLASSIFICARIA

Qualidade das refeições (Confecção, aspecto, temperatura, quantidade, variedade da ementa, etc.)	5	4	3	2	1	0
Apoio durante a refeição ( caso não conseguiu comer sozinho/a)	5	4	3	2	1	0

### OS EXAMES OU TRATAMENTOS NOUTROS SERVIÇOS (análises, radiografias, TAC's, etc.)

Tempo de espera	5	4	3	2	1	0
Em termos globais como avalia a qualidade dos serviços prestados na realização de exames ou tratamentos	5	4	3	2	1	0

### O TRANSPORTE

Como avalia o transporte de ambulância	5	4	3	2	1	0
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( Assinatura)

# Open Peer Review

Current Peer Review Status:  

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## Version 1

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### Saravana Kumar

Division of Health Sciences, University of South Australia, Adelaide, Australia

This is an interesting and well conducted research study which sheds light on the patients' perspectives of aspects of health care in an internal medicine ward. It is a well presented manuscript which is easy to read with logically presented arguments. I have two main comments.

1. It would have been worthwhile to expand on the process which led to the development of the survey instrument. While the authors provide a brief overview of the process, such as the conduct of the focus groups etc, it is imperative to provide detailed information about this as the development and the psychometric properties of the instrument can play an important role in the believability of the research findings.

2. I am not sure about some of the items in the survey instrument. For example, what does "is it a reliable department" actually mean? Reliable in term so what? Similarly, what does "is it a department with experience" actually relate to. Is it a question about health practitioners who work there or about how long the department has been in place and hence its reputation? These questions may give rise to ambiguity in the interpretation and as such influence the responses.

**Competing Interests:** No competing interests were disclosed.

**I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

Reviewer Report 22 February 2013

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**Erin Aiello Bowles**

Research Department, Group Health Research Institute, Seattle, WA, USA

I only have one major comment, which is that the authors don't provide any information on non-responders. It would be interesting to know more about the characteristics of those people, and whether they differ from responders because this could affect the generalizability of the results.

**Competing Interests:** No competing interests were disclosed.

**I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

Author Response 14 Mar 2013

**Antonio Agripino Costa Oliveira**, Centro Hospitalar Gaia-Espinho, Portugal

We want to express our appreciation to Erin Aiello Bowles for taking the time and effort necessary to revise our manuscript. We have carefully considered your comment which states that we didn't provide any information on non-responders. We agree that sampling bias is the major problem in patient satisfaction studies; but in our study the response rate was high and the self-administered questionnaire was filled out by patients or their representatives at time of discharge. Indeed we have some information on the variables; sex, age and length of stay, in patient non-responders, but we don't have any information for the representative non-responders.

**Competing Interests:** Authors declare no relevant competing interests

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